

NARRATIVE

TO: Hamid Yavari
FROM: Tracey Hiltunen
DATE: May 23, 2022

Facility Name: **Blount Construction Co.**
AIRS No.: 117-00012
Location: Cumming, GA (Forsyth County)
Application #: 28343
Date of Application: March 23, 2022

Background and Purpose of Application

Blount Construction Co. currently operates an asphalt plant at 911 Canton Hwy, Cumming, Georgia (Forsyth County). The facility is a synthetic minor (SM) source with respect to Title V regulations. The plant operates under the asphalt plant Permit-By-Rule (PBR) Permit No. 2951-117-0012-R-01-0 issued on December 16, 2004. In accordance with the asphalt plant PBR requirements, the facility can only burn natural gas/LPG and/or distillate oil, limit asphalt production to 300,000 tons, and limit operating hours to 3,000 hours during any twelve consecutive month period.

Application No. 28343 was received on March 28, 2022, for the replacement of the existing drum and baghouse and to add a crusher to run recycled asphalt. The replacement drum has a normal hourly production rate of 250 tons per hour and a maximum of 400 tons per hour. A public advisory was issued and expired on May 6, 2022. No comments were received from the public.

Updated Equipment List

The table below lists all equipment which is referenced specifically by the permit, or for which an applicable regulation exists.

Table 1.

Emission Units			Associated Control Devices	
Source Code	Description	Installation Date	Source Code	Description
DRUM	120 MMBtu/hr heat input capacity, Drum Mix Dryer (Drum Replacement)	2022	BAG2	Baghouse
RAP	Cedarapids RAP System – Crusher, screen, and belt conveyors (Inventory # RS1043)	2022	n/a	None

*proposed within current application

Emissions Summary

Blount Construction Co. operates under the Hot Mix Asphalt Plants Permit-By-Rule. The requirements of Permit-by-Rule 391-3-1-.03(11)(b)5 will continue to keep the facility's potential to emit below the major source thresholds of Title V of the Clean Air Act. The Permittee will continue to comply with the operational limits in the asphalt plant Permit-By-Rule and NSPS which includes the following limits.

1. Burn natural gas/LPG and/or distillate oil only.
2. Total production of asphalt is limited to 300,000 tons, during any twelve consecutive months.
3. Total plant operating hours are limited to 3,000 hours during any twelve consecutive months.
4. The Subpart I Particulate Matter (PM) Standard of 0.04 gr/dscf from the dryer.

Table 1 below shows the plant's potential to emit (PTE) and the permit by rule (PBR) limited potential emission rates to be achieved by means of a "Permit By Rule," for the criteria pollutants. The emissions from the hot mix asphalt manufacturing were calculated using the above-established PBR limits and the published AP-42 emission factors.

Table 1. Facility Potential-to-Emit

Pollutant	Potential Emissions - Uncontrolled (Tons/year)	PBR Limited Emissions (Tons/year)	Major Source Threshold Limits (Tons/year)
PM (filterable only)	24.53	2.1	100
PM ₁₀	6.83	0.59	100
PM _{2.5}	33.99	2.91	100
NO _x	96.36	8.25	100
CO	227.76	19.50	100
SO ₂	19.27	1.65	100
VOC	56.06	4.8	100
Total HAPs	9.28	0.80	25
Formaldehyde (Individual HAP)	5.43	0.47	10

Sample emission calculation:

For a permit by rule (PBR) production limit of 300,000 tpy, CO emissions are:

$[300,000 \text{ tpy}] * [0.13 \text{ lb/ton}] * [1 \text{ ton}/2,000 \text{ lb}] = 19.5 \text{ tpy}$

Regulatory Applicability

The asphalt plant remains subject to 40 CFR 60 Subpart I - "Standards of Performance for Hot Mix Asphalt Facilities," including the testing requirements for particulate matter and opacity. Georgia Rules (b) - "Visible Emissions" and (n) "Fugitive Dust" remain in effect.

The RAP system processes nonmetallic minerals as defined in 40 CFR 60 Subpart OOO - "Standards of Performance for Nonmetallic Processing Plants." Therefore, the plant's crushing operation (which has no capture systems), conveying transfer points and any other affected process units are subject to the applicable emission standards for fugitive emissions under NSPS Subpart OOO. These limits are more

stringent than that of Georgia Rule (n). The Permittee also shall comply with the applicable testing, monitoring, reporting and recordkeeping requirements under NSPS Subpart OOO.

Permit Conditions

This permit has been updated to include all the current conditions for asphalt plants except for the requirements specifically stated in the Permit-By-Rule for Asphalt Plants. These PBR requirements include burn natural gas/LPG and/or distillate oil only; limit asphalt production to 300,000 tons, during any twelve consecutive months; and limit operating hours to 3,000 hours during any twelve consecutive months.

Conditions 1.1 through 1.5 are standard conditions containing general requirements for SIP permits.

Condition 2.1 requires that the asphalt plant complies with NSPS 40 CFR 60 Subpart I. Condition 2.2 establishes the applicability and emission limits of 40 CFR 60 Subpart OOO. Condition 2.3 limits the opacity from any stack, unless otherwise limited, to the Georgia Rule (b) 40 percent opacity limit.

Condition 3.1 is a standard condition specifying the requirements for Georgia Rule (n) regarding fugitive dust.

Condition 4.1 is a standard condition requiring routine maintenance on air pollution control equipment. Condition 4.2 contains the standard requirement that the company must keep extra bags on hand, so baghouse bags that fail can be replaced in a reasonable amount of time. Condition 4.3 requires the facility to implement a Preventative Maintenance Program for the baghouses. This includes daily pressure drop readings and weekly checks on the baghouse and associated equipment for proper operation.

Condition 5.1 is a standard condition, requiring that monitoring systems be operated and kept in good repair. Condition 5.2 requires the installation and operation of pressure drop indicators and temperature indicators on the dryer baghouse. Condition 5.3 requires the facility to record the baghouse temperature daily.

Condition 6.1 is a standard condition, providing information regarding testing requirements. Condition 6.2 requires the facility to conduct performance testing in accordance with the provisions of 40 CFR 60.8 for affected sources as required by the NSPS. Condition 6.3 requires additional testing if production rates are increased. Condition 6.4 requires the facility to conduct subsequent testing on the dryer baghouse and RAP system to demonstrate on-going compliance with the stated limits.

Condition 7.1 requires the facility to provide notification of the actual startup date of the equipment at this site. Condition 7.2 contains standard record keeping requirements for asphalt plants including asphalt production, operating hours, and fuel usage. Condition 7.3 contains standard recordkeeping requirements. Condition 7.4 contains the required recordkeeping and requirements for sources subject to 40 CFR 60 Subpart OOO.

Conditions 8.1 and 8.2 contain standard recordkeeping and reporting requirements regarding modifications at the facility. Condition 8.3 contains the requirements for modification of affected sources subject to 40 CFR 60 Subpart OOO.

Condition 9.1 is a standard condition allowing the Division to re-open the permit if it is determined that additional emissions control is necessary to ensure the safety of the public. Condition 8.2 requires the

payment of annual permit fees, in accordance with the Georgia Rules for Air Quality Control and the fee manual. Condition 8.3 requires the facility to keep a copy of the permit onsite. Condition 8.4 revokes the existing permit.

Summary & Recommendations

I recommend that Permit No. 2951-117-0012-R-02-0 be issued to Blount Construction Co. for the replacement of the existing drum and baghouse and the ability to process recycled asphalt. This plant operates under the asphalt plant Permit-By-Rule and as a synthetic minor source with regard to Title V. It remains assigned to the Mountain District Cartersville Office for compliance responsibility. A public advisory was issued and expired on May 6, 2022 with no comments received.